Larry Richard Myer

Education

- 1973–1977 Ph.D. in Engineering, Major Field—Geological Engineering; Minor Fields—Soil Mechanics and Engineering Analysis; University of California, Berkeley. Dissertation: "An Investigation of Stand–Up Time of Tunnels in Squeezing Ground."
- 1972–1973 M.Sc. in Engineering, Major Field—Geological Engineering; University of California, Berkeley.
- 1968–1972 B.Sc. in Engineering, Department of Engineering Mechanics, with supplemental courses from Department of Geosciences, Pennsylvania State University.

Experience

- California Energy Commission, Public Interest Energy Research Program, Sacramento, California, 2004-present
  Position held:
  WESTCARB Technical Director

- Earth Sciences Division (ESD), Lawrence Berkeley National Laboratory, Berkeley, California, 1979–present.
  Positions held:
  Head, Energy Resources Program, 1998-2002.
  Head, Energy Resources Department, 1996-1998.
  Head, Geoscience Measurements Center, 1993–1996.
  Coordinator, DOE Office of Basic Energy Sciences Geosciences Program, 1989–1993.
  Principal Investigator, 1979–present.

- Golder Associates, Kirkland, Washington, 1977-1979
  Position held:
  Geotechnical Engineer

Research Interest and Qualifications

Dr. Myer has research management experience in the areas of fossil energy and carbon sequestration. As Energy Resources Program Head, he was responsible for programmatic leadership of the ESD oil, gas and geothermal research program, a multidisciplinary effort focused on reservoir characterization and monitoring, and optimization of reservoir performance. He has been leading research in geologic sequestration since 1999, and became the Program Head when geologic sequestration became a separate research program in ESD in 2006. He currently leads The West Coast Regional Carbon Sequestration Partnership (WESTCARB) which is evaluating carbon dioxide capture, transport, and sequestration technologies, involving both terrestrial and geologic options, for the region comprising Arizona, California, Nevada, Oregon, Washington, and Alaska. He is widely recognized as an expert in the science and technology of geologic sequestration.

Dr. Myer's research experience as a Principal Investigator spans a wide range from basic theoretical and laboratory investigations of rock properties and processes to field measurements of rock behavior and instrumentation development. Basic research activities have been directed at understanding the microprocesses associated with deformation and failure of rock, seismic wave propagation, and fluid flow in fractured porous media. A particular focus has been the mechanical, hydrologic and seismic properties of single fractures with the development of new theoretical concepts accompanied by laboratory and field validation experiments.

Invited Lectures

"CO_2 Sequestration Options for the West Coast", Senate Energy Committee Briefing, Washington DC, April 13, 2007.
"Geologic Sequestration Status and Future Prospects", presented at Council of State Governors – West, Jackson Hole WY, September 17, 2007

"CCS Safety and Analogues", presented at Capacity Building for Emerging Economies, Porto Alegre, Brazil, Oct 17 – 19, 2007

"Regional Sequestration Partnerships, Underpinnings for CCS Deployment in the U. S., presented at CO2CRC Research Symposium, The Vines Resort, Western Australia, Nov 6, 2007

"CCS Public Acceptance in California, Experience and Observations", presented at Eight Annual Carbon Sequestration Forum, Stanford CA, Nov 14, 2007

"CO_2 Sequestration Options for Nevada", presented to Nevada Public Utilities Commission Special Session, December 7, 2007.

"Geologic CO_2 Storage Options for California", presented at public workshops organized by the NRDC in Sacramento and Los Angeles, Feb 13 – 14, 2008

Recent Publications, Refereed Journals

1. Hovorka, S., D., Benson, S. M., Doughty, C., Freifeld, B. M., Sakaurai, S., Daley, T M., Kharaka, Y. K., Holtz, M. H., Trautz, R. C., Nance, H. S., Myer, L. R., and Knauss, K. G., (2006), "Measuring permanence of CO_2 storage in saline formations: the Frio experiment ", Environmental Geosciences, vol 13, No. 2, pp. 105-121

2. Freifeld, B. M., Trautz, R. C., Kharaka, Y., K., Phelps, T. J., Myer, L. R., Hovorka, S. D., and Collins, D. J., (2005), "The U-tube: A novel system for acquiring borehole fluid samples from a deep geologic CO_2 sequestration experiment", Journal of Geophysical Research, Vol 110, B10203, October

3. Daley, T. M., Myer, L. R., Peterson, J. E., Majer, E. L., Hoversten, G. M., (2007) "Time- lapse crosswell seismic and VSP monitoring of injected CO_2 in a brine aquifer", Journal of Environmental Geology.